



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/780,271

02/17/2004

Philip C. Hodge

110308.0005

2235

39905

7590

04/29/2009

ROETZEL AND ANDRESS  
222 SOUTH MAIN STREET  
AKRON, OH 44308

EXAMINER

STEVENS, ROBERT

ART UNIT

PAPER NUMBER

2162

MAIL DATE

DELIVERY MODE

04/29/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/780,271	<b>Applicant(s)</b> HODGE ET AL.	
	<b>Examiner</b> ROBERT STEVENS	<b>Art Unit</b> 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-16,18,19,22-30,32-34,36-41,43-45 and 47-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-16,18,19,22-30,32-34,36-41,43-45 and 47-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The Office withdraws the previous claim objections and previous rejections of the claims under 35 USC §101, in light of the amendment. The Office maintains the previous rejections of the claims under 35 USC §103(a), in light of the amendment. Additionally, the Office sets forth new rejections of the claims under 35 USC §112-2<sup>nd</sup> paragraph, in light of the amendment.

### ***Response to Arguments***

2. Applicant's arguments filed 12/17/2008 have been fully considered but they are not persuasive.

The previous claim objections and previous rejections under 35 USC 101 have been withdrawn, in light of the Amendments.

Regarding the previous rejections of the claims under 35 USC 103(a), Applicant argues on pages 12-14 that the cited references do not teach updating of a hyperlink, because Ferguson's STG file is not a link to a specific electronic document, but rather a file that describes a corresponding electronic document.

The Office respectfully disagrees, noting that the references as a whole teach the recited claim language. First, it is noted that the Ferguson passage at col. 8 lines 28-32 discusses that documents are "linked" through their corresponding STG files. A hyperlink is also a link to a corresponding document. Therefore, STG files have been reasonably interpreted as being suggestive of a link / hyperlink mechanism, as they perform the same function. Second, as

Art Unit: 2162

Applicant has noted in the last paragraph of page 13 of the Remarks, Ferguson states that "an existing STG file may be updated if the corresponding document is modified". The fact that Ferguson may also eliminate that lineage under certain circumstances is irrelevant as far as the claim language is concerned. For instance, if a linked document is deleted from Applicant's system, does Applicant preserve the link? The claims do not address such a scenario. Therefore, the references have been properly interpreted as teaching the recited claim language.

Applicant further argues on page 14 that the independent claims reciting substantially similar limitations, and all dependent claims are allowable for the reasons argued above.

The Office respectfully disagrees, and counter-asserts the rationale set forth above.

It is further noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-1333, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

The Office also notes MPEP § 2144.01, that quotes In re Preda, 401 F.2d 825, 159 USPQ 342, 344 (CCPA 1968) as stating "in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." Further MPEP 2123, states that "a

Art Unit: 2162

reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989).

For at least these reasons, the Office asserts the rejections of the claims as set forth below.

***Continued Examination Under 37 CFR 1.114***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/17/09 has been entered.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 27-30, 33-34 and 36-39 are rejected under 35 U.S.C. 112, second paragraph,** as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims are vague and ambiguous, and thus, their scope is indeterminable.

**Regarding claim 27:** This claim recites several means (or step) plus function limitations that invoke 35 U.S.C. 112, sixth paragraph. There are two issues related to 35 U.S.C. 112, sixth paragraph.

For instance, the claim limitations “digital computer means”, “means for generating” and “means for updating” use the phrase “means for”, but it is modified by some structure, material, or acts recited in the claim. It is unclear whether the recited structure, material, or acts are sufficient for performing the claimed function which would preclude application of 35 U.S.C. 112, sixth paragraph. These “means for” recitations merely require the use of some data (e.g. a node and a hierarchical node structure), and do not appear sufficient for performing the claimed function.

**Regarding claim 33:** This claim recites several means (or step) plus function limitations that invoke 35 U.S.C. 112, sixth paragraph. There are two issues related to 35 U.S.C. 112, sixth paragraph.

For instance, the claim limitations “means for updating a path”, “transmitting means” and “means for substantially simultaneously” use the phrase “means for”, but it is modified by some structure, material, or acts recited in the claim. It is unclear whether the recited structure, material, or acts are sufficient for performing the claimed function which would preclude

application of 35 U.S.C. 112, sixth paragraph. These “means for” recitations merely require the use of some data (e.g. a node and a hierarchical node structure), and do not appear sufficient for performing the claimed function.

If applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to amend the claim so that the phrase “means for” or “step for” is clearly **not** modified by sufficient structure, material, or acts for performing the claimed function.

If applicant does **not** wish to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to amend the claim so that it will clearly not be a means (or step) plus function limitation (e.g., deleting the phrase “means for” or “step for”).

Additionally, the written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function. The requirement that a particular structure be clearly linked with the claimed function in order to qualify as corresponding structure is the *quid pro quo* for the convenience of employing 35 USC 112, sixth paragraph, and is also supported by the requirement of 35 USC 112, second paragraph, that an invention must be particularly pointed out and distinctly claimed. See *Medical Instrumentation & Diagnostics Corp.*, 344 F.3d at 1211, 68 USPQ2d at 1268.

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it clearly links or associates the corresponding structure, material, or acts to the claimed function without introducing any new matter (35 U.S.C. 132(a)); or

(c) State on the record where the corresponding structure, material, or acts are set forth in the written description of the specification that perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1, 3-16, 18-19, 22-30, 32-34, 36-41, 43-45 and 47-56 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Kim et al. (US Patent Application Publication No. 2003/0120729, filed as a continuation of Application no. 08/908544, which was filed on Aug. 7, 1997 and published on Jan. 26, 2003, hereafter referred to as “Kim”) in view of Ferguson et al. (US Patent No. 6,820,094, filed Oct. 8, 1997 and issued Nov. 16, 2004, hereafter referred to as “Ferguson”) and Grefenstette et al. (US Patent Application Publication No. 2004/0205448, provisionally filed on Aug. 13, 2001 and published on Oct. 14, 2004, hereafter referred to as “Grefenstette”).

**Regarding independent claim 1:** Kim discloses

*A digital computer system, including a terminal and a data-management system for generating a hyper link in real time between an electronic document opened in a computer application and a target document, said digital computer terminal comprising a computer readable memory and a data-capture device,* (See the Abstract and paragraphs [0012] – [0014] in Kim, discussing automatic link generation between a target and an HTML document opened in a browser application upon scanning a document into a target file digital format) *said data-management system comprising: data-capture logic for controlling capture of electronic data by said data-capture device;* (See Figure 4 #4 in Kim, showing the use of a scanner.) *target-document logic for generating said target document from said electronic data; and* (See paragraph [0012] in Kim, discussing inputting a document to a scanner or fax and creating a file.) *link-generating logic for substantially simultaneously storing said target document in said computer readable memory and generating said hyper link to said target document in said electronic document in real time;* (See paragraphs [0012] – [0014] in Kim, discussing automatic link generation and storage and noting that paragraph [0014] discusses retrieval of the created image file, which inherently required that the file be stored before being retrieved.) *data-management logic for transmitting said electronic document and said target document to a data storage device* (See paragraphs [0013] – [0014] in Kim, discussing the storage of documents.)

However, Kim does not explicitly teach *wherein said data management logic and said link editing logic automatically updates the path of said hyper link to maintain functionality of said hyper link following said transmission*. Ferguson, though, suggests this limitation. (See column 3 lines 59-65 in Ferguson, discussing updating the STG data storage file, in the context of column 7 lines 47-57, discussing a scenario involving link generation due to “the modification of its corresponding document”.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Ferguson for the benefit of Kim, because to do so provided a user with an efficient way to automatically import, index, categorize, store, search, retrieve, manipulate and archive electronic documents, as taught by Ferguson in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

Additionally, Kim does not explicitly teach *and link-editing logic for updating a path of said hyper link*. Grefenstette, though, suggests this limitation. (See Grefenstette paragraph [0295] discussing the dynamic updating of links.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Grefenstette for the benefit of Kim in view of Ferguson, because to do so provided a user with a system for enriching or supplementing the document that the user is accessing, as taught by Grefenstette in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

**Regarding claim 3:** Kim does not explicitly teach the use of top-level directories and subfolders. Ferguson, though, suggests this limitation. (See Figure 3 and column 4 lines 59-67 in Ferguson, illustrating the use of top-level folder and subdirectories. The specific data one arranged in a hierarchy was an obvious variant to one skilled in the art at the time of the invention.)

**Regarding claim 4:** Kim teaches the use of hard disk data storage. (See Figure 1 #3 in Kim, showing a file server computer, it having been well-known in the art that file server computers contain a hard drive.

**Regarding claim 5:** Kim does not explicitly teach printing. Ferguson, though, suggests this limitation. (See column 11 lines 29-32 in Ferguson, discussing a utility for viewing and printing documents.)

**Regarding claims 6-12:** Kim does not explicitly teach the recited limitations. Ferguson, though, suggests these limitations. (See column 10 lines 9-11 in Ferguson, discussing the processing of multipage documents, and column 15 lines 34-40, discussing the linking of a plurality of documents to/from a compound document. Establishing links, whether in a 1:1, 1:MANY, MANY:1 or MANY:MANY fashion, was an obvious variant to one skilled in the art at the time of the invention.)

**Regarding claim 13:** Kim does not explicitly teach link removal. Ferguson, though, suggests this limitation. (See column 7 lines 53-57 in Ferguson, discussing the removal of only the link.)

**Regarding claims 14-16 and 18-19:** Kim does not explicitly teach the recited limitations. Ferguson, though, suggests the use of an add-in. (See Figure 12 in Ferguson, showing the display results for a browser application add-in.) Ferguson also suggests the use of a data management system for text documents. (See the Abstract of Ferguson, discussing a document management application program, it having been an obvious variant to one skilled in the art at the time of the invention as to number of software modules and the location of specific functionality in each module.) Ferguson also suggests link-editing/ updating. (See column 3 lines 59-65 in Ferguson, discussing the updating of an STG data storage file.) Ferguson teaches the use of icons. (See column 12 lines 41-52 in Ferguson, discussing the use of icons to represent hyperlinks.)

**Regarding claim 22:** Kim does not explicitly teach printing. Ferguson, though, suggests this limitation. (See column 11 lines 29-32 in Ferguson, discussing a utility for viewing and printing documents.)

**Regarding claims 23-26:** Kim does not explicitly teach the recited limitations.

Ferguson, though, suggests these limitations. (See column 10 lines 9-11, discussing the processing of multipage documents, and column 15 lines 34-40, discussing the linking of a plurality of documents to/from a compound document. Establishing links, whether in a 1:1, 1:MANY, MANY:1 or MANY:MANY fashion, was an obvious variant to one skilled in the art at the time of the invention.)

**Regarding independent claim 27:** Kim discloses

*A data-management system for generating a plurality of links to target documents in an electronic document*, (See the Abstract and paragraphs [0012] – [0014] in Kim, discussing automatic link generation between a target and an HTML document opened in a browser application upon scanning a document into a target file digital format) *said data-management system comprising: means for creating and editing an electronic document; means for generating a plurality of target documents from electronic data captured by a data-capture device*; (See paragraph [0012] in Kim, discussing inputting a document to a scanner or fax and creating a file object.) *means for storing said plurality of captured target documents in a computer readable memory; and means for generating a link at a plurality of user-selected locations in said electronic document to said plurality of captured target documents*. (See paragraphs [0012] – [0014] in Kim, discussing automatic link generation and storage and noting that paragraph [0014] discusses retrieval of the created image file, which inherently required that the file be stored before being retrieved.)

However, Kim does not explicitly teach editing, generation of a plurality of documents or use of sequential identifiers. Ferguson, though, suggests editing. (See column 12 lines 8-15 in Ferguson, discussing an edit menu and editing functions. See also col. 3 lines 22-25 discussing the use of a general purpose computer.) Ferguson also suggests the generation of a plurality of target documents. (See column 15 lines 30-39 in Ferguson, discussing clipped documents being formed from a plurality of documents such as images, Word documents and HTML files, and column 15 line 63 – column 16 line 6, discussing links to a compound document from each component target document.) Ferguson further suggests the use of sequential identifiers for targets. (See column 5 lines 1-15 in Ferguson, discussing the sequential numbering of documents [e.g., D<sub>1</sub>, D<sub>2</sub>, etc.] )

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Ferguson for the benefit of Kim, because to do so provided a user with an efficient way to automatically import, index, categorize, store, search, retrieve, manipulate and archive electronic documents, as taught by Ferguson in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

Additionally, Kim does not explicitly teach *means for updating a path of said plurality of hyperlinks in a user selected range of said electronic document*. Grefenstette, though, suggests this limitation. (See Grefenstette paragraph [0295] discussing the dynamic updating of links.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Grefenstette for the benefit of Kim in view of Ferguson, because to do so provided a user with a system for enriching or supplementing the document that the user is accessing, as taught by Grefenstette in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

**Regarding claim 28:** Kim does not explicitly teach printing. Ferguson, though, suggests this limitation. (See column 11 lines 29-32 in Ferguson, discussing a utility for viewing and printing documents.

**Regarding claim 29:** Kim teaches “transmitting” documents to storage. (See paragraphs [0013] – [0014] in Kim, discussing storage of documents.) However, Kim does not explicitly teach updating link paths. Ferguson, though, suggests this limitation. (See column 3 lines 59-65 in Ferguson, discussing updating the STG data storage file, in the context of column 7 lines 47-57, discussing a scenario involving updates requiring link elimination.)

**Claim 30** is substantially similar to claim 3, and therefore likewise rejected.

**Regarding independent claim 32:** Kim discloses

*A computer system for linking a target document to a portion of an electronic document in real time* (See the Abstract of Kim, discussing automatic link generation to a scanned document file), *said computer system comprising: a computer for generating and editing an electronic document;* (See the Abstract of Kim, discussing the use of a scanner and generation of an electronic file.) *link-generating logic operable with said computer application for generating a link to said target document, wherein said target document is an electronic reproduction of a hardcopy document and is to be generated by scanning said hardcopy document with an optical data-capture device, further wherein said link is to be generated at approximately the same time as said captured target document is to be saved, and further wherein said computer application is one of a group consisting of a spreadsheet, word processor, database, presentation application, and any combination thereof.* (See the Abstract and paragraphs [0012] – [0014] in Ferguson, discussing a browser application and automatic link generation to an HTML page and storage, in context of [0005], discussing the scanning of paper documents using an optical data-capture device such as a scanner. It is noted that paragraph [0014] discusses retrieval of the created image file, which requires that the file be stored.)

However, Kim does not explicitly teach editing. Ferguson, though, suggests editing. (See column 12 lines 8-15 in Ferguson, discussing an edit menu and editing functions.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Ferguson for the benefit of Kim, because to do so provided a user with an efficient way to automatically import, index, categorize, store, search, retrieve, manipulate

Art Unit: 2162

and archive electronic documents, as taught by Ferguson in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

Additionally, Kim does not explicitly teach *and link-editing logic for updating a path of said link*; Grefenstette, though, suggests this limitation. (See Grefenstette paragraph [0295] discussing the dynamic updating of links.) *and the link is automatically updated* Grefenstette, though, suggests this limitation. (See Grefenstette paragraph [0295] discussing the dynamic updating of links.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Grefenstette for the benefit of Kim in view of Ferguson, because to do so provided a user with a system for enriching or supplementing the document that the user is accessing, as taught by Grefenstette in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

**Regarding independent claim 33:** Kim discloses

*A data-management system for linking a portion of an electronic document to a target document*, (See the Abstract of Kim, discussing linking an input image) *said data-management system comprising: a data-capture device for capturing electronic data representing an information object*; (See Figure 4 #4 in Kim, showing the use of a scanner.) *means for generating said target document from said electronic data*; (See paragraph [0012] in Kim,

Art Unit: 2162

discussing inputting a document to a scanner or fax and creating a file.) ***a computer readable memory to store said target document; and*** (See paragraph [0014] in Kim, which discusses the retrieval of the created image file, which required that the file be stored before being retrieved. It is inherent that such data storage required a computer readable memory.) ***means for substantially simultaneously storing said target document in said computer readable memory and generating a link to said target document in said electronic document;*** (See paragraphs [0012] – [0014] in Kim, discussing automatic link generation and storage and noting that paragraph [0014] discusses retrieval of the created image file, which inherently required that the file be stored before being retrieved.) ***means for transmitting said electronic document and said target document to a data storage device;*** (See paragraphs [0013] – [0014] in Kim, discussing the storage of documents.)

However, Kim does not explicitly teach ***wherein said transmitting means automatically updates a path of said link to maintain functionality of said link following transmission.***

Ferguson, though, suggests this limitation. (See column 3 lines 59-65 in Ferguson, discussing updating the STG data storage file, in the context of column 7 lines 47-57, discussing a scenario involving link generation due to “the modification of its corresponding document”).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Ferguson for the benefit of Kim, because to do so provided a user with an efficient way to automatically import, index, categorize, store, search, retrieve, manipulate and archive electronic documents, as taught by Ferguson in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

Additionally, Kim does not explicitly teach *and means for updating a path of said plurality of hyperlinks in a user-selected range of said electronic document*; Grefenstette, though, suggests this limitation. (See Grefenstette paragraph [0295] discussing the dynamic updating of links.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Grefenstette for the benefit of Kim in view of Ferguson, because to do so provided a user with a system for enriching or supplementing the document that the user is accessing, as taught by Grefenstette in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

**Regarding claim 34:** Kim teaches the use of a scanner. (See paragraph [0012] of Kim.)

**Claims 36-37** are substantially similar to claims 3-4, respectively, and therefore likewise rejected. It is further noted that the exact “means” (e.g., hardware or software element) in which a particular functionality was implemented, was an obvious variant to one skilled in the art at the time of the invention.

**Regarding claims 38-39:** Kim does not explicitly teach printing. Ferguson, though, suggests this limitation. (See column 11 lines 29-32, discussing a utility for viewing and printing documents.)

**Regarding independent claim 40:** Kim discloses *An electronic-document management method for creating and managing an electronic document having a link to a target document in a computer application*, (See the Abstract and paragraphs [0012] – [0014] in Kim, discussing automatic link generation between a target and an HTML document opened in a browser application upon scanning a document into a target file digital format) *said method comprising the steps of: generating a target document from electronic data representing an information object captured by a data-capture device; and* (See paragraph [0012] in Kim, discussing inputting a document to a scanner or fax and creating a file object.) *substantially simultaneously storing said target document in a computer readable memory and generating said link at said user-selected location in said electronic document.* (See paragraphs [0012] – [0014] in Kim, discussing automatic link generation and storage and noting that paragraph [0014] discusses retrieval of the created image file, which inherently required that the file be stored before being retrieved.) **transmitting said electronic document and said target document to a data storage device upon receiving a command from a user;** (See paragraphs [0013] – [0014] in Kim, discussing the storage of documents.)

However, Kim does not explicitly teach *and updating a path of said link to render said link operable after said transmission*. Ferguson, though, suggests this limitation. (See column 3 lines 59-65 in Ferguson, discussing updating the STG data storage file, in the context of column 7 lines 47-57, discussing a scenario involving link generation due to “the modification of its corresponding document”.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Ferguson for the benefit of Kim, because to do so provided a user with an efficient way to automatically import, index, categorize, store, search, retrieve, manipulate and archive electronic documents, as taught by Ferguson in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

Additionally, Kim does not explicitly teach *and updating the path of said link*. Grefenstette, though, suggests this limitation. (See Grefenstette paragraph [0295] discussing the dynamic updating of links.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Grefenstette for the benefit of Kim in view of Ferguson, because to do so provided a user with a system for enriching or supplementing the document that the user is accessing, as taught by Grefenstette in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

**Regarding claim 41:** Kim does not explicitly teach document viewing. Ferguson, though, suggests this limitation. (See Figure 1 element #169 and column 11 lines 28-32 in Ferguson, discussing document viewing.)

**Claim 43** is substantially similar to claim 3, and therefore likewise rejected.

**Regarding claim 44:** Kim does not explicitly teach printing. Ferguson, though, suggests this limitation. (See column 11 lines 29-32 in Ferguson, discussing a utility for viewing and printing documents.)

**Claim 45** is substantially similar to claim 18, and therefore likewise rejected.

**Regarding independent claim 47:** Kim discloses

*An electronic-document management method for creating and managing an electronic document having a plurality of links to target documents in a computer application,* (See the Abstract and paragraphs [0012] – [0014] in Kim, discussing automatic link generation between a target and an HTML document opened in a browser application upon scanning a document into a target file digital format. It was an obvious variant to one skilled in the art at the time of the invention to include more than one link.) *said method comprising the steps of: generating a plurality of target documents from electronic data representing one or more information*

Art Unit: 2162

*objects captured by a data-capture device;* (See paragraph [0012] in Kim, discussing inputting a document to a scanner or fax and creating a file object.) *generating one or more links to the target documents in said electronic document.* (See the Abstract and paragraphs [0012] – [0014] in Kim, discussing automatic link generation between a target and an HTML document opened in a browser application upon scanning a document into a target file digital format. It was an obvious variant to one skilled in the art at the time of the invention to include more than one link.)

However, Kim does not explicitly teach *editing, generation of a plurality of documents or use of sequential identifiers.* Ferguson, though, suggests editing. (See column 12 lines 8-15 in Ferguson, discussing an edit menu and editing functions.) Ferguson also suggests the generation of a plurality of target documents. (See column 15 lines 30-39 in Ferguson, discussing clipped documents being formed from a plurality of documents such as images, Word documents and HTML files, and column 15 line 63 – column 16 line 6, discussing links to a compound document from each component target document.) Ferguson further suggests the use of sequential identifiers for targets. (See column 5 lines 1-15 in Ferguson, discussing the sequential numbering of documents [e.g., D<sub>1</sub>, D<sub>2</sub>, etc.] )

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Ferguson for the benefit of Kim, because to do so provided a user with an efficient way to automatically import, index, categorize, store, search, retrieve, manipulate and archive electronic documents, as taught by Ferguson in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

Additionally, Kim does not explicitly teach *and updating the path of said link*.

Grefenstette, though, suggests this limitation. (See Grefenstette paragraph [0295] discussing the dynamic updating of links.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Grefenstette for the benefit of Kim in view of Ferguson, because to do so provided a user with a system for enriching or supplementing the document that the user is accessing, as taught by Grefenstette in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

**Claims 48-49** are substantially similar to claim 42 and claim 3, respectively, and therefore likewise rejected.

**Regarding claim 50:** Kim does not explicitly teach printing. Ferguson, though, suggests this limitation. (See column 11 lines 29-32 in Ferguson, discussing a utility for viewing and printing documents.)

**Regarding claim 51:** Kim does not explicitly teach the use of icons. Ferguson teaches the use of icons. (See column 12 lines 41-52 in Ferguson, discussing the use of icons to represent links.)

**Regarding claim 52:** Kim does not explicitly teach updating link paths. Ferguson, though, suggests this limitation. (See column 3 lines 59-65 in Ferguson, discussing updating the STG data storage file, in the context of column 7 lines 47-57, discussing a scenario involving updates requiring link elimination.)

**Regarding claim 53:** Kim does not explicitly teach user selected link locations, comparing the number of locations with the number of documents to be linked and generating a link for each document. Ferguson, though, suggests these limitations. (See column 9 lines 51-65 in Ferguson, discussing updating the importing documents, and column 9 lines 27-31, discussing the linking of multiple documents.)

**Claims 54-55** are substantially similar to claims 24-25, respectively, and therefore likewise rejected.

**Regarding independent claim 56:** Kim discloses *A data-management system for generating a hyperlink in real time between a portion of an electronic document opened in a computer application and a target document,* (See the Abstract and paragraphs [0012] – [0014] in Kim, discussing automatic link generation between a target and an HTML document opened in a browser application upon scanning a document into a target file digital format. It was an obvious variant to one skilled in the art at the time of the invention to include more than one link.) *said system comprising: a digital computer terminal*

Art Unit: 2162

*comprising a computer readable memory and a data-capture device;* (See Figure 2 #88 and #82 of Kim) *data-capture logic in communication with said digital computer terminal for controlling capture of electronic data by said data-capture device;* (See The Kim Figure 2 #80, 81 and 82, in context of paragraph [0012] discussing the use of a scanner.) *target-document logic in communication with said digital computer terminal for generating said target document from said electronic data;* (See the Abstract of Kim, discussing generation of a target document via a scanning process for display in a browser.) *link-generating logic in communication with said digital computer terminal for substantially simultaneously storing said target document in said computer readable memory and generating said link to said target document in said electronic document in real time;* (See the Abstract and paragraphs [0012] – [0014] in Kim, discussing automatic link generation between a target and an HTML document opened in a browser application upon scanning a document into a target file digital format. It was an obvious variant to one skilled in the art at the time of the invention to include more than one link.) *data-management logic for transmitting said electronic document and said target document to a data storage device.* (See paragraphs [0013] – [0014] in Kim, discussing the storage of documents.)

However, Kim does not explicitly teach *wherein said data-management logic automatically updates a path of said link to maintain functionality of said link following said transmission.* Ferguson, though, suggests this limitation. (See column 3 lines 59-65 in Ferguson, discussing updating the STG data storage file, in the context of column 7 lines 47-57,

Art Unit: 2162

discussing a scenario involving link generation due to “the modification of its corresponding document”).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Ferguson for the benefit of Kim, because to do so provided a user with an efficient way to automatically import, index, categorize, store, search, retrieve, manipulate and archive electronic documents, as taught by Ferguson in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

Additionally, Kim does not explicitly teach *link-editing logic for updating a path of said link*; Grefenstette, though, suggests this limitation. (See Grefenstette paragraph [0295] discussing the dynamic updating of links.) *and said link updating logic for updating a path of said link automatically updates a path of said link to maintain functionality of said link following said transmission.* Grefenstette, though, suggests this limitation. (See Grefenstette paragraph [0295] discussing the dynamic updating of links.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Grefenstette for the benefit of Kim in view of Ferguson, because to do so provided a user with a system for enriching or supplementing the document that the user is accessing, as taught by Grefenstette in the Abstract. These references were all applicable to the same field of endeavor, i.e., the management of electronic documents.

Art Unit: 2162

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

***Non-Patent Literature***

Devanbu, P., et al., "CHIME: Customizable Hyperlink Insertion and Maintenance Engine for Software Engineering Environments", ICSE '99, Los Angeles, CA, May 16-22, 1999, pp. 473-482.

Myka, Andreas, et al., "Automatic Hypertext Conversion of Paper Document Collections", Lecture Notes in Computer Science, Springer Verlag, © 1995, pp. 1-18.

Pinheiro, Francisco A. C., et al., "An Object-Oriented Tool for Tracing Requirements", IEEE Software, Vol. 13, Issue 2, Mar. 1996, pp. 52-64.

Carr, Leslie, et al., "Open Information Services", Computer Networks and ISDN Systems, Vol. 28, Issues 7-11, May 1996, pp. 1027-1036.

***US Patent Application Publications***

Mohit et al	2005/0060162
Benyon et al	2004/0267726
Goodisman et al	2002/0069223

***US Patents***

Benyon et al	7,290,131
Dozier et al	7,139,812
Horowitz et al	6,122,647
Skarbo et al	6,317,777
Fogg et al	6,321,242
Malcolm	6,256,631
Peairs	6,182,090
Dozier et al	5,870,552
Gentner	5,724,595
van Hoff	5,822,539

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert Stevens/  
Examiner  
Art Unit 2162

April 26, 2009